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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,710	02/14/2002	Andrew Sutherland	103140-0014U	8378

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EXAMINER

BATAILLE, PIERRE-MICHE

ART UNIT PAPER NUMBER

2186

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,710

Applicant(s)

SUTHERLAND ET AL.

Examiner

Pierre-Michel Bataille

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 3-18 and 22-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is taken in response to Applicant's communication filed July 25, 2005 responding the Office Action dated April 21, 2005. Applicant's amendments and/or arguments have been considered with the results that follow.
2. Claims 1-36 are pending in the application under prosecution.

Response to Arguments

3. Applicant's arguments filed July 25, 2005 have been fully considered but they are not deemed to be persuasive for at least the following remarks.

Applicant argues that the claims feature "storage coordinator designating selected groups of nodes within a plurality of nodes as replication groups and directs the nodes selected for a given group to communicate peer-to-peer to replicate associated group files". Applicant further admits that Stringer-Calvert (US 2002/0055989) provides VPN, which may provides peer-to-peer networks with dynamic node group membership and distributed management managed by a master node or Super-VPN.

In addition to applicant admission, it must be noted that Stringer-Calvert's reference is used for providing the peer-to-peer networks having multiple nodes and a master node, with the master node controlling group membership as well as enabling

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distribution of tasks. Paragraphs 0010 and 0042 clearly disclose the master node operating as, in addition to management of tasks, content delivery server network rerouting requests to content that has been previously replicated or cached by member nodes (Paragraph 0042). Although Stringer-Calvert discloses the system being fault tolerant and peer-to-peer network systems including file/resource-sharing services and the maser node being a content delivery server [paragraphs 0047 & 0042] and the master node being a storage coordinator that designates selected groups of nodes within the plurality of nodes, i.e. providing file/resource-sharing services and the maser node being a content delivery server, the rejection correctly acknowledges that Stringer-Calvert fails to explicitly disclose the master node directing the nodes to replicate associated group files.

One of ordinary skill in the art would have realized that, having Stringer-Calvert's references before him at the time of the invention, the master node would act as the claimed storage coordinator that centrally manages distributed storage resources that replicate file group as each group being a particular private network. The rejection provides "A Replicated Architecture for a Domain Name System" (Kangasharju et al), which cures the above noted deficiency. Kangasharju discloses a plurality of name servers cooperating over a network wherein all cooperating name servers, each holds the master files containing all the resources records and each is responsible to make changes to the master file in the usual manner; each responsible to keep the master file information up-to-date, and each responsible to shared the update they have received from primary name server that they parent. Therefore, one of ordinary skill in the art

would have arrived at the claimed invention as Kangasharju teaches replicating associated group files to significantly improve access times and Stringer-Calvert discloses the importance of having a system being fault tolerant in peer-to-peer network system having file/resource-sharing services.

In view of the above remarks, it is respectfully noted that applicant's arguments are nor persuasive. The rejection is maintained and repeated below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over 2002/0055989 (Stringer-Calvert et al) in view of "A Replicated Architecture for a Domain Name System" (Kangasharju et al).

With respect to claims 1 and 19-20, Stringer-Calvert teaches a plurality of file storage nodes that are distributed on and communicate peer-to-peer over a network ***[(plurality of collaborative groups communicating with each other as members or subsets of a virtual private network (VPN) in a peer-to-peer network) Paragraph 0007-0008; 0011; 0022]***; a storage coordinator (***first master node***) that manages file

storage on the plurality of file storage nodes **[(each master node controlling membership of a subset of the members) paragraphs 0008 & 0022]**, the storage coordinator designating selected groups of nodes within the plurality of files storage nodes **[(master node being a group leader for managing and maintaining group members of the VPN) Par. 0025 & 0022]** and directing the nodes into a given group to communicate peer-to-peer **[paragraphs 0047 & 0022]**. Stringer-Calvert fails to specifically disclose the master node dedicated to replicate associated group files, although specifically disclosing the system being fault tolerant and peer-to-peer network systems including file/resource-sharing services **[paragraph 0047]**. However, Kangasharju discloses a plurality of name servers cooperating over a network wherein all cooperating name servers, each holds the master files containing all the resources records and each is responsible to make changes to the master file in the usual manner; each responsible to keep the master file information up-to-date, and each responsible to shared the update they have received from primary name server that they parent [see pages replicated DNS architecture, page 661 and Interaction among Replicated Name Servers, page 662]. Therefore, it would have been obvious to one of ordinary skill in the art to arrive at the claimed invention as Kangasharju teaches replicating associated group files to significantly improve access times. The addition would have provided fault tolerance as Stringer-Calvert discloses the importance of having a system being fault tolerant in peer-to-peer network system having file/resource-sharing services.

With respect to claims 2 and 21, Stringer-Calvert teaches an administrative console that administers policies set by an administrator, providing policies to the storage coordinator and the storage coordinator designating the groups in accordance with the policies provided by the administrative console [paragraph 0022; 0041-0042].

Allowable Subject Matter

6. Claims 3-18 and 22-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

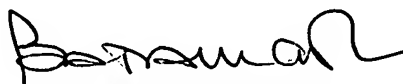
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (571) 272-4178. The examiner can normally be reached on Mon-Fri (8:00A to 4:30P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pierre-Michel Bataille
Primary Examiner
Art Unit 2186

October 14, 2005

PIERRE BATAILLE
PRIMARY EXAMINER